The Cary Arboretum

of The New York Botanical Garden

A Newsletter published for Friends of the Arboretum
by the Public Affairs Department.

January-February, 1983

Box AB
Millbrook, N.Y. 12545

Volume IX, Number 1

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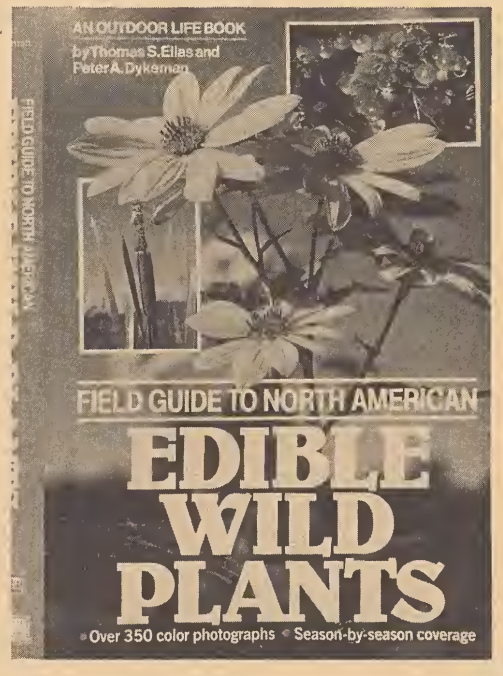
Drs. Elias and Dykeman Author Book on Edible Wild Foods

Field Guide to North American Edible Wild Plants, written by Arboretum Assistant Director Dr. Thomas Elias and Education Coordinator Dr. Peter Dykeman, was published in December, 1982 by the Outdoor Life Book Club and Van Nostrand Reinhold. This 288-page field guide contains a season-by-season reference to the identification, harvest and preparation of more than 200 of the most popular and commonly available edible plants that grow in the fields, woods, swamps, mountains, and along the roadsides of the United States and Canada.

The book's unique "Seasonal Key to Plants" lists plants by primary edible season, and within each seasonal section, plants are arranged by type. They are listed under five main categories: ferns, monocots, dicots, vines, shrubs and trees.

Over the past two years, Drs. Elias and Dykeman have researched extensively hundreds of wild plants and their uses. Each plant included in the book is treated with a detailed description and full information on its edible parts, and how and when to harvest and prepare them. Of special interest and value is a section on poisonous look-alikes.

First offered through the Outdoor Life Book Club, signed copies of *Field Guide to North American Edible Wild Plants* are now


AN OUTDOOR LIFE BOOK
by Thomas S. Elias and Peter A. Dykeman
FIELD GUIDE TO NORTH AMERICAN
EDIBLE WILD PLANTS
Over 350 color photographs
Season-by-season coverage

available at the Cary Arboretum Gift Shop located in the Gifford House Education Center, Route 44A. Shop hours are Tuesday through Friday, 11 a.m. to 4:30 p.m. and weekends, 1:30 to 4:30 p.m.

Gypsy Moth Research Continues

Studies on the interaction of the gypsy moth with its habitat continue at the Cary Arboretum as a result of a renewed grant by the New York State Department of Environmental Conservation.

A one-year pilot project designed to determine feasibility of predicting when, where and how much gypsy moth damage will occur was completed at the Arboretum in November, 1982. Also funded by the New York State Department of Environmental Conservation, this pilot project identified a number of ecological relationships of potential value in prediction.

Twenty 10-meter diameter plots on the Arboretum's Tea House Hill are being monitored for gypsy moth and existing vegetation throughout the seasons. Thousands of gypsy moth egg masses were counted, tagged and measured, vegetation was identified, and defoliation of trees was recorded on camera in an effort to better understand this destructive insect. In the laboratory, studies on the size of egg masses, egg numbers, egg parasitism, hatching success and other characteristics were recorded to relate to field data.

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Fifth Expedition to U.S.S.R. Completed

Moscow, Yalta, Leningrad and Kiev were the principal cities visited in an autumn, 1982 trip to the Soviet Union. This exchange, as with others in previous years, was part of a bilateral agreement in the field of environmental protection, arranged through the U.S. Departments of Interior and State.

Cary Arboretum Assistant Director Dr. Thomas Elias and Research Assistant Lydia Newcombe comprised the two-member team. The purpose of this four-week visit to major research institutions was to gather information for a book on the trees of the Soviet Union, data regarding threatened and endangered species, current work on nature protection, and the establishment of reserves. During the next three years, Dr. Elias hopes to complete an up-to-date manual of trees in the English language. This project is receiving the support of individual Soviet botanists who often think that much of their botanical literature is neglected in the United States. The technical manual will include descriptions of the species, information about their ecology, important references, maps, and illustrations. Reference materials and thousands of plant specimens collected by Dr. Elias in that country during previous botanical exchange programs serve as the basis for this project.

A series of papers concerning nature protection in the U.S.S.R. is underway by Dr. Elias and Ms. Newcombe. This January, *Science* Magazine published a feature article by Dr. Elias about threatened and endangered species of plants in the Soviet Union. A copy

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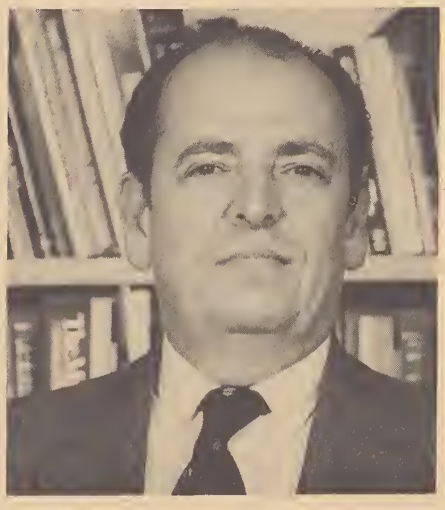
Director's Notes



Bernard Heyman, Photographer

Dr. Willard W. Payne

In the later years of Mrs. Cary's life, a majestic avenue of sugar maples extended from highway 44 up the Sharon Turnpike (within memory, a beautiful dirt road) nearly to the Gifford House. In the summer, a green vault welcomed travelers to the shade, and in autumn a golden glory of leaves and light made this allee a visual marvel. When the Arboretum was born in 1971, these trees were beginning to fade, but the overwhelming sense was still of a tree-lined way, backed by a rustic fence standing in front of long barberry hedges and other trees behind.

During the past decade, most of the old maples have gone, one by one, victims of age, decay, and pollution-related decline. This year the dominant aspect had become one of a sagging wire fence in front of which were miscellaneous damaged and dying trees and of an unattractive assortment of highway signs and posts bearing proscriptions against hunting and unauthorized trespass. This was particularly unfortunate because the Gifford House Education Center, approached by this highway, has become a major gathering place for students and visitors, and the exit near the solar building is now the principal access point to the Arboretum grounds and gardens.

Happily, Mrs. Cary had anticipated a time when the old trees would become unsightly and would fade, and had set the stage for renaissance by planting farther back, on both sides of the road, rows of young sugar maples to replace them. Early this autumn, Coordinator of Operations Winfried Schubert, Horticulturist Robert Hebb, and I stood on the Sharon Turnpike, now state highway 44-A, surveying the scene, and the sense grew upon us all that the time for change had come. As Win Schubert said, "The fence doesn't want us to see the beauty beyond." By removing the fence and old trees and repairing the barberry hedge, we could transform the roadway once again into one dominated by nature rather than by barriers, warnings, and arborescent decay. And so we have begun.

Today the fences are gone, and the necessary postings are properly inconspicuous. A broad avenue of lawns, hedges, and trees, reassuringly regimented, provides a broad perspective that invites you to breath deeply and enjoy the benefits of trees and space and live things in harmony. With permission from the State Highway Department, the dying trees, now in the foreground, will soon be removed. When funds for purchase and planting can be found, a selection of flowering and Chinese dogwoods *(Cornus florida* and *C. kousa)* will be underplanted with the maples to produce delightful shows in every season. We hope that we can minimize the occasional, temporary unsightliness of tree removal, and we know the community and our members and visitors will be pleased with the improved approaches and entrances to the Cary Arboretum.

Ninth Annual Maple Sugaring Weekend Scheduled for March 12, 13

Maple Sugaring Weekend, one of the Arboretum's most popular events, is scheduled for March 12 and 13, 11 a.m. to 4 p.m.

During the weekend, the tapping, boiling and candymaking processes known in the Northeast for many centuries will once again be demonstrated by Cary Arboretum staff and volunteers. As in the past several years, the 1983 Maple Sugaring Weekend will include special programs and displays depicting maple sugaring techniques and other seasonal activities of the American Indian.

This ninth annual Maple Sugaring Weekend will include, back by popular demand, an all-you-can-eat pancake and sausage luncheon featuring homemade sausage and butter, and *real* maple syrup.

Admission fees for the event are as follows: Adults, $3.00; senior citizens, $2.00; and children (5-18), $1.50. Children under 4 will be admitted free of charge. Prices for the luncheon are $3.75 for adults and senior citizens, and $2.50 for children ages 5 to 12. Children under four eat for free!

Library News

Angell, Madeline. *A Field Guide to Berries and Berry-like Fruit.* Indianapolis: Bobbs-merrill, 1981.

This delightful book makes a perfect gift for any nature lover and hiker. The book is organized by the color of the fruit at maturity, and is cross-referenced in cases where berries turn more than one color during ripening. Each entry provides a black-and-white illustration of the plant (berries in color), description, habitat, uses and other remarks of interest. The book is divided into three sections: flowering herbs, woody vines, shrubs and trees. At the back there is a glossary and 5-page bibliography of related identification tests.

Stobart, Tom. *Herbs Spices and Flavorings.* Woodstock, NY: The Overlook Press, 1982.

Have you ever wondered about the origin of Worcestershire sauce or what spices were contained in your curry powder? This unique encyclopedia covers topics from Ajowan to Zedoary with occasional black and white illustrations of the plants discussed. Each entry has its name represented in a number of foreign languages. The appendix at the back has plants listed by family, and there is also a general index of plants and other terminology. This is a fascinating text for gourmets and herb enthusiasts.

Langsner, Drew. *A Logbuilder's Handbook.* Emmaus, PA: Rodale, 1982.

This text contains some interesting historical facts on the log cabin tradition in Europe and America, and has directions for considering the economics of building. Instructions will take you from the planning stages right through to the finishing work on the inside. Obviously, one book cannot answer all questions, but it can become a good source for basic information. The appendix contains lists for further reading, tool suppliers, and floor plans of the author's house.

Moyer, Roger A. *Solar Heat-N-Grow Window.* Emmaus, PA: Rodale, 1982.

This book contains the plans and instruc-

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At the Garden

Spring arrives January 15 at the New York Botanical Garden's lovely Enid A. Haupt Conservatory in the Bronx, where the "Promise of Spring" show will be on display through April 6.

Of special interest will be forced bulbs, hybrid and botanical tulips, azaleas and other flowering shrubs. As winter turns into spring, "Promise of Spring" also will change, with displays of forced perennials in the limelight during mid-March and early April.

Members of the Cary Arboretum are admitted free to the Enid A. Haupt Conservatory, which is only a 70-mile drive from Millbrook. The easiest, most direct way to drive there is to take the Taconic Parkway south to the Sprain Brook Parkway from which the New York Botanical Garden has its own exit. Follow Southern Boulevard to the Garden's main entrance across from Fordham University.

The Enid A. Haupt Conservatory is open Tuesday through Sunday, 10 a.m. to 4 p.m. The Garden's Snuff Mill Restaurant is also open during these hours. Sandwiches and snacks can also be purchased on Wednesdays and weekends from 11 a.m. on in the Conservatory's Hanging Garden.

Members' Trip to Washington, D.C. April 27, 28, 29, and 30, 1983

Once again expanding our extremely popular and very successful tours for members only, we offer you the opportunity to spend four days in our nation's Capital, pursuing an extraordinary itinerary composed of the loveliest sights and sounds in this historic city. Adding their noted bonhomie and unique expertise will be your hosts, Dr. and Mrs. Willard W. Payne and Horticulturist Robert S. Hebb.

Accommodations will be at the handsome, centrally located Dupont Plaza Hotel. Highlights will include the U.S. National Arboretum's spectacular displays of hybrid and native azaleas and dogwoods at the peak of their bloom, the Japanese Garden with its bonsai collection, the famous dwarf conifer collection, and the National Herb Garden; a cruise on the Potomac River to Mt. Vernon to explore George Washington's estate and its ordered walks, lawns, splendid trees, and varied gardens; Dumbarton Oaks, "one of the last great private gardens to be created in this century"; and the magnificent Washington Cathedral with its Bishop's Garden, Greenhouse, and Herb Cottage. We add to all of the above the traditional hosts' hospitality party – AND – a gala evening, a performance by the London Symphony Orchestra at the John F. Kennedy Center for the Performing Arts Concert Hall. Other special surprises are planned.

The cost for this trip is $219.50 per person double occupancy (single supplement, $63.00), which includes transportation, hotel accommodations, all tour admissions and fees, hospitality hour, gratuities, a $25 tax deductible contribution to the Cary Arboretum, and the Kennedy Center performance. NO MEALS ARE INCLUDED. We shall accept your reservations beginning January 17, 1983, confirmed upon deposit of $50 per person, on a first come-first served basis. All reservations must be taken by March 18, and deposits are nonrefundable after that date. For further information, please contact Mrs. Janice Claiborne (914-677-5343), Cary Arboretum, Box AB, Millbrook, New York 12545.

Fifth Expedition
Continued from page 1

of this paper may be obtained by writing to the Cary Arboretum. Ms. Newcombe is presently researching and writing a review paper about nature preserves. To acquaint Soviet scientists with the work on threatened and endangered species of plants in the United States, Dr. Elias has prepared a paper on this subject which will be translated into Russian and published in *Priroda* (Nature), a major science journal in the U.S.S.R.

Later this year, the two Cary staff members will prepare a paper about the structure and organization of botanical gardens and arboreta. Not only the American public, but most American Botanical staff are uninformed about Soviet Botanical Gardens.

In the summer and early autumn of this year, another reciprocal exchange will take place. It is planned that Soviet botanists will visit and conduct field work in California, while American botanists will travel to the Far East region of the U.S.S.R.

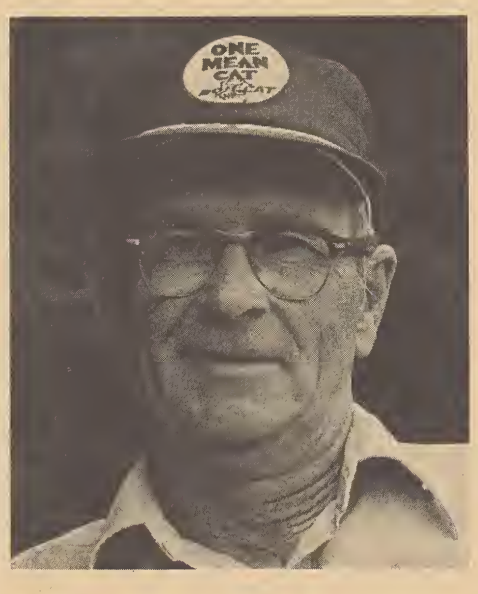
Street Trees of Lakeville and Salisbury Studied

A major study has been made of the trees that line the streets and highways of the twin communities of Lakeville and Salisbury, Connecticut. This survey is one in a series of similar studies conducted in this region by Assistant Director Dr. Thomas S. Elias.

During the summer months, Gwen Feldman, a graduate student and summer research assistant, examined each of the trees and gathered information about their identity, condition, and physical setting as part of an intensive survey. These data have been computerized and are currently being analyzed by Dr. Elias. Initial results show that Lakeville and Salisbury have a considerably greater diversity of trees than other northeastern communities of comparable size. Ninety-one types of trees were observed growing along or near streets, highways, or in parks. There is also a healthy mixture of young and intermediate-aged trees, along with some outstanding examples of mature trees. The combination of so many different kinds and different ages of trees creates a relatively stable community which effectively prevents major problems due to the unlikely introduction of a serious disease or pest.

As in other regions, the ash trees in the two communities are declining and dying. Since the cause of ash decline is unknown, so is a treatment; thus, these trees will continue to die. Furthermore, the survey showed that the nutrient levels in the soils are low; a carefully planned program of fertilization should be implemented. Dr. Elias is presently completing the plan and recommendations that will be submitted to the Salisbury Association, the sponsor of this study. Mrs. Alexander Pope, a Salisbury resident and tree enthusiast, has been working closely with Dr. Elias and Ms. Feldman during the course of this study and supplying valuable information concerning past tree planting efforts in these twin communities.

People at the Arboretum



Mike Chadwell

Since September 1977, Mike Chadwell has spent his summers outdoors enjoying the beauty of the Arboretum. As a gardener, one of his most time-consuming summer responsibilities is mowing the Arboretum lawns – a job that is never over until the autumn leaves have fallen.

Born in Warrington, Virginia, Mike and his family moved to Millbrook in 1928 when his father took a job with the Millbrook Hunt. Mike graduated from Millbrook High School and shortly thereafter spent two years with the Army in the South Pacific, and a total of four years in the armed forces.

Before joining the Cary staff, Mike was a cattleman by trade. During his thirty years with Rally Farms in Millbrook, he took care of the breeding stock and delivered more calves than he can remember.

At the Arboretum, "learning" has been one of Mike's greatest joys. As a member of the grounds crew, he has had top-notch training from his colleagues on tree maintenance, pruning and planting. He occasionally goes back to some of the birches, pines and willows he has planted over the years to see how they have grown.

In his leisure time, Mike enjoys hunting, fishing and bowling. Married 40 years, he and his wife "Jingle" live in Stanfordville and have four grown daughters. Together they share the hobby of metal detecting and can usually be found on summer weekends scanning ballfields, picnic areas and Connecticut beaches for old coins and jewelry. Coins from the 1800's and several gold rings are among their recent findings.

To Mike, the Arboretum has been a place of natural beauty and peace – a description of the Arboretum for which each individual staff member can take personal pride.

Around the Arboretum

Winter Tour Schedule

Tours through the Arboretum's greenhouse complex and solar-heated Plant Science Building have taken on a winter schedule effective now through March 1.

Sunday afternoon tours of both buildings will be available by appointment through the Arboretum's Gifford House Education Center (914) 677-5358. The tours, conducted between 1:30 and 3:30 p.m., can be arranged for both individuals and groups.

Tours through both buildings will continue to be conducted on Wednesdays, 1:30 to 3:30 p.m., for which no prior reservation is necessary.

The combined fee for both tours is $1.50 for adults and 75¢ for children and senior citizens. Members of the Arboretum are not charged for tours.

At a Glance

January 16
Opening reception 1:30 to 4 p.m. – drawings and paintings by Gene Fairbanks. Plant Science Building. Through March 7.
January 27
First in a series of winter quilting classes. Phone 677-5358 to register.
January 27
First in a series of stained glass workshops. Phone 677-5358 to register.
February 6
Sunday afternoon slide talk – Ralph Aiello: Mid-Hudson Mosaic. 3 p.m. Gifford House.
February 20
Sunday afternoon slide talk – Frank Knight: Our Needs for Nature. 3 p.m. Gifford House.
March 7
First in a series of classes: "Photography in Depth". Call 677-5358 to register.
March 12 and 13
Maple Sugaring Weekend. (See related article, this issue.)
Cary Gift Shop
Hours: Tuesday through Friday, 11 a.m.-4:30 p.m.
Weekends: 1:30-4:30 p.m.
Visa and Master Card Accepted.

Eugene Fairbanks to Exhibit

Eugene Fairbanks, well-known in Dutchess County for his paintings and pen and ink drawings of county historical sites and points of interest, will exhibit a series of landscape paintings, pen and ink drawings and watercolor sketches beginning January 16 in the Arboretum's Plant Science Building.

An art instructor at John Jay High School, Mr. Fairbanks has exhibited his work in New York City, Paris, Pittsfield, Massachusetts and throughout Connecticut. Locally he has participated in shows at the IBM Country Club and the Art Depot Gallery.

Most recently, Mr. Fairbanks completed the official Dutchess County Tercentenary Calendar. The calendar contains twelve pen and ink drawings depicting well-known historical sites in Dutchess County.

His exhibit at the Arboretum, which runs through March 7, will begin with a gallery reception on January 16, 1:30 to 4 p.m. Visiting hours to the exhibit are weekdays, 8:30 a.m. to 4:30 p.m and Sundays, 1:30 to 3:30 p.m.

Gypsy Moths
Continued from page 1

Robin Parow-Place, Photographer

Annie Narahara and Karen Budwill measure gypsy moth egg masses as part of an intensive on-going study.

The renewed grant, in the amount of $15,000, will enable Arboretum research scientist Dr. Clive Jones and his assistants Karen Budwill and Annie Narahara to continue the analysis of the extensive pilot project data from the 1981-1982 season, and to continue to collect ecological data in the field. By March, 1983, the first of a series of methodologies designed to improve the accuracy of predicting gypsy moth damage will be recommended to the Department of Environmental Conservation.

According to Dr. Jones, the techniques developed for quantifying egg mass quality (the number of larvae hatching from egg masses of different sizes) will be tested for the DEC as the program continues. In addition, a more accurate method of estimating egg mass numbers will be developed.

Library News
Continued from page 2

tions for building a combination solar air heater and window greenhouse in an existing window of your home. As with all the books in the Build-It-Yourself series, this one has easy directions, illustrations and a complete set of plans and materials.